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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/815,591	03/23/2001	Victor Spivak	EMCCP074	5572

21912 7590 09/19/2007

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EXAMINER	
BASEHOAR, ADAM L	

ART UNIT	PAPER NUMBER
2178	

MAIL DATE	DELIVERY MODE
09/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/815,591	SPIVAK ET AL.	
	Examiner	Art Unit	
	Adam L. Basehoar	2178	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 June 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to communications: The Amendment filed 06/25/07.

2. Claims 1-5 and 7-20 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Russell-Falla et al (US: 6,675,162 01/06/04) in view of Weiser et al (US-5,982,507 11/09/99) in view of Doerre et al (US-6,446,061 09/03/02) in further view of Chakrabarti et al (US-6,418,433 07/09/02).

3. Claim 6 remains rejected under 35 U.S.C. 103(a) as being unpatentable over Russell-Falla et al (US: 6,675,162 01/06/04) in view of Weiser et al (US-5,982,507 11/09/99) in further view of Doerre et al (US-6,446,061 09/03/02) in further view of Chakrabarti et al (US-6,418,433 07/09/02) in further view of W3C's, "Extensible Markup Language (XML) 1.0", 02/10/98, pp. 1-2, http://www.w3.org/TR/1998/REC-xml-19980210.

4. Claims 1-20 are pending in the case. Claims 1, 7, and 14 are independent claims.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 1, 7, and 17, contain the newly added negative limitation, "wherein the

conceptual model is not included in the conceptual taxonomy." Any negative limitation or exclusionary proviso must have basis in the original disclosure. If alternative elements are positively recited in the specification, they may be explicitly excluded in the claims. See In re Johnson, 558 F.2d 1008, 1019, 194 USPQ 187, 196 (CCPA 1977) ("[the] specification, having described the whole, necessarily described the part remaining."). See also Ex parte Grasselli, 231 USPQ 393 (Bd. App. 1983), aff 'd mem., 738 F.2d 453 (Fed. Cir. 1984). The mere absence of a positive recitation is not basis for an exclusion. Any claim containing a negative limitation which does not have basis in the original disclosure should be rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

Regardless, the Examiner believes that the Doerre references teaches said newly added limitation. As shown below, the Examiner is now interpreting the feature vector of Doerre to equate to the conceptual model of the claimed invention.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1-5 and 7-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Russell-Falla et al (US: 6,675,162 01/06/04) in view of Weiser et al (US-5,982,507 11/09/99) in

view of Doerre et al (US-6,446,061 09/03/02) in further view of Chakrabarti et al (US-6,418,433 07/09/02).

-In regards to independent claims 1, 7, and 14, Russell-Falla teaches a computer-implemented method comprising a processor (Abstract) and memory (Fig. 1: 30) connected to said processor, wherein the method further comprises;

recognizing a concept (column 2, lines 54-63) that represents a basic idea (content category)(column 2, lines 35-39; column 4, lines 32-47) in a document format (column 2, lines 35-39; column 3, lines 17-20);

incorporating said concept in a concept model (i.e. "pornographic", "commercial solicitations", "racist", "good", "bad", etc)(column 3, lines 39-43 & 60-67; column 8, lines 20-48); and

using said conceptual model (column 3, lines 39-67) to determine whether said document was responsive to a search query (column 2, lines 5-22: "search engine"; column 3, lines 2-7; column 5, lines 53-67; column 6, lines 1-7)(i.e. the conceptual model determines where the document was responsive to a search query based on whether the categorized document was blocked or viewed by the user).

Russell-Falla further teaches wherein the document format could be any number of common document formats including an electronic email message, a word processing document, hypertext document, and any number of other types of documents (columns 3 & 4, lines 23-26 & 51-53). Russell-Falla does not teach wherein the initial document format have to be converted to one of the common document formats to be processed. Weiser et al teach converting a document format (email message) from an email format to a common generic format (column 12, lines 53-

55). It would have been obvious to one of ordinary skill in the art at the time of the invention for Russell-Falla to have converted its initial format document to one of the common document formats listed above, because Weiser et teach by doing so the common format can be understandable by the document system (column 12, lines 44-56)(i.e. converting document to a format able to be processed by the a specific system provides the obvious advantage of being able to process the document in that system).

Russell-Falla does not specifically teach using a conceptual taxonomy specifying at least one relationship between two or more concepts to associate a concept type identification with said concept. Russell-Falla also does not teach incorporating said concept in a conceptual model at least in part by using said concept type identification, wherein the conceptual model was not included in the conceptual taxonomy. Doerre et al teach routing an unprocessed document using a conceptual taxonomy (column 4, lines 37-52: "tree-structured taxonomy-hierarchy")(Fig. 2: 213 & 216) specifying at least one relationship between two or more concepts (column 4, lines 40-52 & 66-67; column 5, lines 1-6; column 12, lines 60-67; column 13, lines 1-60: "Hierarchical Clustering") to associate a concept type identification with said concept (column 4, lines 47-62: "document assigned to a leaf-node...similarity"; column 5, lines 28-49: "computing for each of said clusters a category-scheme...of each document of said cluster"; column 6, lines 60-65: "labeling each node of the taxonomy-hierarchy"). Doerre also teaches incorporating said concept in a conceptual model at least in part by using said concept type identification (column 4, lines 31-67; column 5, lines 1-56: i.e. the feature vector calculated for the newly routed document was utilized in conjunction with the taxonomy to incorporate the concept of the document into a predefined concept cluster or into it's own original cluster newly created within

the taxonomy), wherein the conceptual model was not included in the conceptual taxonomy (column 5, lines 43-65: i.e. the feature vector/conceptual model for the unprocessed document was utilized to place the document into the taxonomy, but the feature vector itself was not incorporated into the taxonomy). It would have been obvious to one of ordinary skill in the art at the time of the invention at the time of the invention for the concept in the concept model of Russell-Falla to have utilized a hierarchical conceptual taxonomy to associate a concept type identifier with said concept and incorporating said concept into the concept model based on the identifier, because Doerre et al teach that defining clusters of a conceptual taxonomy with concept type identifiers provides the benefit of good coherence and selectivity of the taxonomy as well as provides good orientation to a user traversing the taxonomy (column 5, lines 33-56; column 6, lines 63-64: i.e. increase user usability). Thus Russell-Falla would gain the benefit of being able to determine the similarities/differences of the categorized pages in greater detail than just "bad" or "good" based on the defined threshold.

Russell-Falla does not specifically teach wherein the search query (column 2, lines 5-22: "search engine"; column 3, lines 2-7; column 5, lines 53-67; column 6, lines 1-7) was associated with said concept type identification; identifying said concept at least in part by using said concept identification of said search query; utilizing the conceptual model (column 3, lines 39-43 & 60-67; column 8, lines 20-48) to determine that said document was associated with said identified concept; and concluding at least in part on the determination that said document was associated with said identified concept, that said document was responsive to said search query (column 2, lines 5-22; column 3, lines 2-7; column 5, lines 53-67; column 6, lines 1-7)(i.e. the conceptual model determines where the document was responsive to a search query based on

whether the categorized document was blocked or viewed by the user). Chakrabarti et al teach wherein the search query was associated with said concept type identification (column 2, lines 23-28 & 58-60: "database of Web pages that is focused on a predefined topic or topics"; column 3, lines 52-57: "focused database...receiving a search query"; column 5, lines 13-27); identifying said concept at least in part by using said concept identification of said search query (column 2, lines 58-60: "generate a database of Web pages that is focused on a predefined topic or topics"; column 5, lines 21-25: "a user can search the database 30 efficiently for Web pages of interest, i.e., only for Web pages relating to the topic of which the database 30 was focuses"); utilizing the conceptual model (column 4, lines 61-66; column 5, lines 13-27) to determine that said document was associated with said identified concept (column 2, lines 58-60; column 3, lines 52-57: column 5, lines 13-27); and concluding at least in part on the determination that said document was associated with said identified concept, that said document was responsive to said search query (column 3, lines 52-57; column 4, lines 61-66; column 5, lines 13-27). It would have been obvious to one of ordinary skill in the art at the time of the invention for Russell-Falla to have received the search query associated with said concept type identification for identifying said concept at least in part by using said identification, wherein the conceptual model determined that said document was associated with said concept, because Chakrabarti et al teach that utilizing models (Fig. 1: 35B & 35B) to associated documents with a predefined topic or topics (i.e. concepts) allows efficient searching of said topics by users (column 2, lines 58-60; column 3, lines 52-57) and overcomes prior searching deficiencies such as a lack of focus of search results (column 2, lines 23-28).

-In regard to dependent claims 2 and 8, Russell-Falla teaches identifying a plurality of features (column 4, lines 59-61: "identify the regular expressions") in said document format, wherein said plurality of features represent evidence ("useful in discriminating a specific category of information")(column 4, lines 61-66) of said concept in said format.

-In regard to dependent claims 3 and 9, Russell-Falla teach calculating a concept weight for said concept ("calculating a rating of the page")(column 3, lines 54-57) using a plurality of feature weights ("requires a weighting be provided for each word of phrase in the list")(column 3, lines 46-57) associated with said plurality of features ("regular expressions")(column 2, lines 55-59; column 8, lines 9-19) wherein said concept weight represents a recognition confidence level for said concept (column 3, lines 54-57);

comparing said concept weight with a predetermined thresholds (column 2, lines 64-67; column 3, lines 1-16).

-In regard to dependent claims 4, 11, 13, and 19, Russell-Falla teaches by referencing said concept model (content category)(column 2, lines 35-39), generating an auto-attribute/category (column 8, lines 39-51), said auto-attribute/category being a descriptive label (i.e. "pornographic", "commercial solicitations", "racist", "good", "bad", etc)(column 3, lines 39-43 & 60-67; column 8, lines 43-45) for said format/category document.

-In regard to dependent claims 5, 12, 18, and 20, Russell-Falla teaches by referencing said concept model (content category)(column 2, lines 35-39), assigning said document format to

a subject category/modeling directory (i.e. "pornographic", "commercial solicitations", "racist", "good", "bad", etc)(column 3, lines 39-43 & 60-67; column 8, lines 43-45) in a categorization taxonomy (column 4, lines 34-45) including a plurality of categories (i.e. "pornographic", "commercial solicitations", "racist", "good", "bad", etc)(column 3, lines 39-43 & 60-67; column 8, lines 43-45).

-In regard to dependent claim 10, Russell-Falla teaches incorporating said recognition confidence level (category threshold) (column 2, lines 64-67; column 3, lines 1-16) in said conceptual model (content category)(column 2, lines 35-39) based on the training data (column 6, lines 52-67; column 7, lines 1-67).

-In regard to dependent claim 15, as shown above, Russell-Falla teaches wherein the common document format was hypertext (HTML) web pages (column 1, lines 33-37)(Fig. 1: 12) or other like information content (column 3, lines 17-22; column 6, lines 25-28; column 8, lines 20-61: "file directories", "email messages", "database records", "other web pages", etc). Russell-Falla does not teach wherein the initial document format has to be converted to one of the common document formats to be processed. Weiser et al teach converting a document format (email message) from an email format to a common generic format (column 12, lines 53-55). It would have been obvious to one of ordinary skill in the art at the time of the invention for Russell-Falla to have converted its initial format document to one of the common document formats listed above, because Weiser et teach by doing so the common format can be understandable by the document system (column 12, lines 44-56)(i.e. converting document to a

format able to be processed by the a specific system provides the obvious advantage of being able to process the document in that system).

-In regard to dependent claim 16, Russell-Falla teaches separating the text content from said initial format document for categorizing documents based on statistical techniques (column 2, lines 52-59). As shown above in dependent claim 15, Russell-Falla does not teach converting the initial document format into a common document format. Weiser et al teach converting a document format (email message) from an email format to a common generic format (column 12, lines 53-55). It would have been obvious to one of ordinary skill in the art at the time of the invention for Russell-Falla to have converted its initial format document to one of the common document formats listed above, because Weiser et teach by doing so the common format can be understandable by the document system (column 12, lines 44-56)(i.e. converting document to a format able to be processed by the a specific system provides the obvious advantage of being able to process the document in that system), wherein it would have also been obvious to incorporate the text from the initial document into the said common document, because Russell-Falla teaches the textual content was what was needed to categorize the incoming documents (column 4, lines 57-66).

-In regard to dependent claim 17, Russell-Falla teaches identifying a plurality of features (column 4, lines 59-61: "identify the regular expressions") in said document format, wherein said plurality of features represent evidence ("useful in discriminating a specific category of information")(column 4, lines 61-66) of said concept in said format. Russell-Falla further teaches

calculating a concept weight for said concept ("calculating a rating of the page")(column 3, lines 54-57) using a plurality of feature weights ("requires a weighting be provided for each word of phrase in the list")(column 3, lines 46-57) associated with said plurality of features ("regular expressions")(column 2, lines 55-59; column 8, lines 9-19), wherein said concept weight represents a recognition confidence level for said concept (column 3, lines 54-57); and

comparing said concept weight with a predetermined thresholds (column 2, lines 64-67; column 3, lines 1-16).

9. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Russell-Falla et al (US: 6,675,162 01/06/04) in view of Weiser et al (US-5,982,507 11/09/99) in further view of Doerre et al (US-6,446,061 09/03/02) in further view of Chakrabarti et al (US-6,418,433 07/09/02) in further view of W3C's, "Extensible Markup Language (XML) 1.0", 02/10/98, pp. 1-2, http://www.w3.org/TR/1998/REC-xml-19980210.

-In regard to dependent claim 6, Russell-Falla teach wherein a common document format was hypertext (HTML) web pages (column 1, lines 33-37)(Fig. 1: 12) or other like information content (column 3, lines 17-22; column 6, lines 25-28; column 8, lines 20-61: "file directories", "email messages", "database records", "other web pages", etc). Russell-Falla does not specifically teach wherein a common format was an XML document. W3C teaches wherein using XML was notoriously well known in the art for web applications (pp. 2: Section 1.1). It would have been obvious to one of ordinary skill in the art at the time of the invention, for one of the common formats of Russell-Falla to have been XML, because W3C teaches that the XML format provides the benefits of being easy to create, being easy to write programs which process

XML documents, and being human-legible and reasonably clear (pp. 2: Section 1.1). It was also notoriously well known in the art at the time of the invention that XML was an International document standard and well known for its separation of data content which was the main embodiment of the Russell-Falla reference (column 4, lines 59-66; column 8, lines 20-38).

Response to Arguments

10. Applicant's arguments filed 06/25/07 have been fully considered but they are not persuasive.

-In general, the Applicant argues that the previous rejection does not teach or suggest the newly amended claim limitations of, "wherein the conceptual model is not included in the conceptual taxonomy." The Examiner respectfully disagrees with the Applicant and believes said newly added claim limitations are taught in the prior art references. In the Doerre reference, the feature vector generated for the unprocessed document has now been equated to the conceptual model of the claimed invention. While the generated feature vector was utilized for placing the unprocessed document into the conceptual taxonomy, the feature vector itself was not incorporated into the taxonomy and thus the Doerre reference is believed to meet the limitations as newly claimed.

-Applicant also argues that the search query on a predefined topic or topics of Chakrabarti does not teach being associated with the "concept type identification" that is used to explicitly identify the "concept" determined by the "conceptual model" to be associated with the document. The Examiner respectfully disagrees with the Applicant. Chakrabarti clearly teaches wherein a user could submit a search query associated with a specific concept type identification

(column 2, lines 23-28 & 58-60: "database of Web pages that is focused on a predefined topic or topics"; column 3, lines 52-57: "focused database...receiving a search query"; column 5, lines 13-27). Chakrabarti also teaches identifying said concept at least in part by using said concept identification of said search query (column 2, lines 58-60: "generate a database of Web pages that is focused on a predefined topic or topics"; column 5, lines 21-25: "a user can search the database 30 efficiently for Web pages of interest, i.e., only for Web pages relating to the topic of which the database 30 was focuses"). Chakrabarti also clearly teaches utilizing the conceptual model that was generated by the topic analyzer for the given web page (column 4, lines 61-66; column 5, lines 13-27; column 10, lines 44-48) to determine that said document was associated with said identified concept (column 2, lines 58-60; column 3, lines 52-57: column 5, lines 13-27: i.e. if the concept model generated for the given web page document indicated that said document belonged to said concept then that web page would be included in the topic specific database set and would thus be associated with said topic); and concluding at least in part on the determination that said document was associated with said identified concept, that said document was responsive to said search query (column 3, lines 52-57; column 4, lines 61-66; column 5, lines 13-27: i.e. document located in the topic database). The Examiner believes that the topic databases of Chakrabarti explicitly identify a concept determined by a conceptual model to identify associated documents stored in the given databases.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam L. Basehoar whose telephone number is (571)-272-4121. The examiner can normally be reached on M-F: 7:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ALB

STEPHEN HONG
SUPERVISORY PATENT EXAMINER